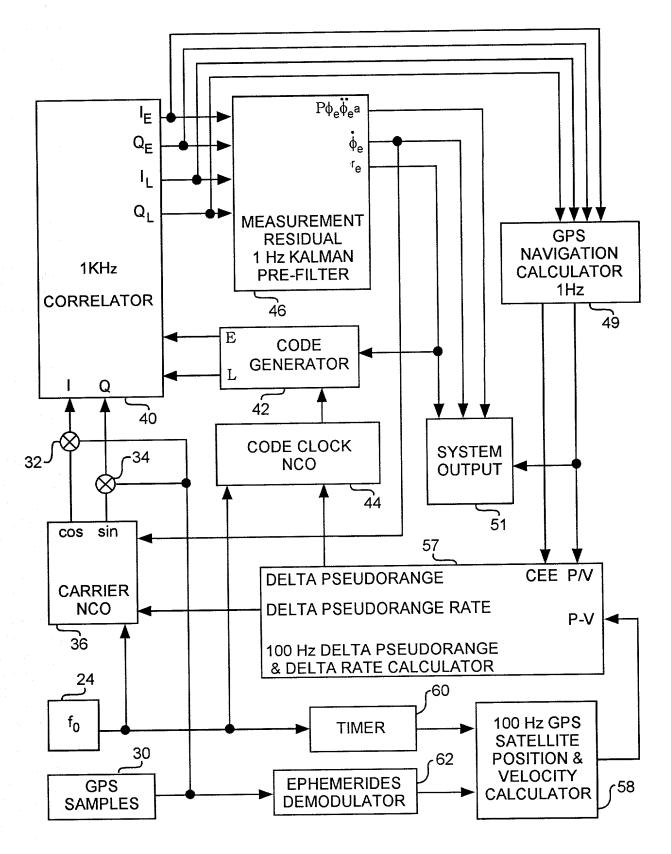
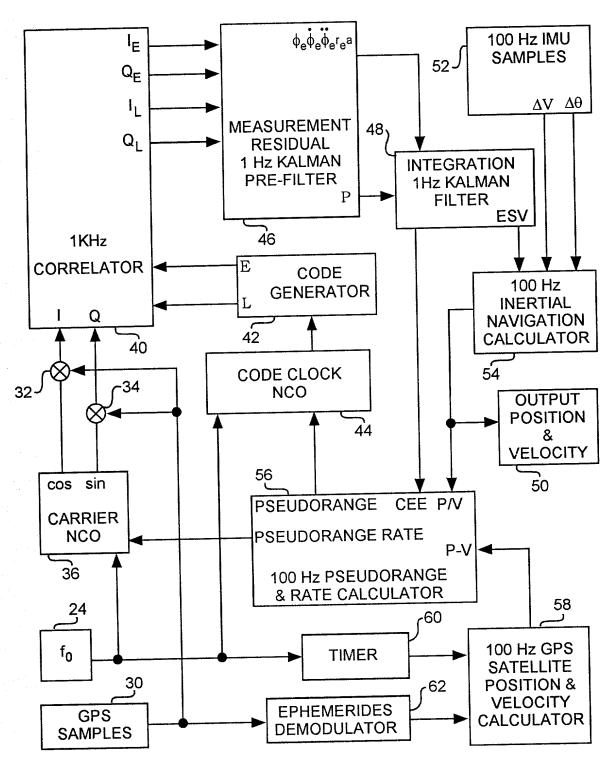


GPS INERTIAL NAVIGATION SYSTEM

FIG. 1

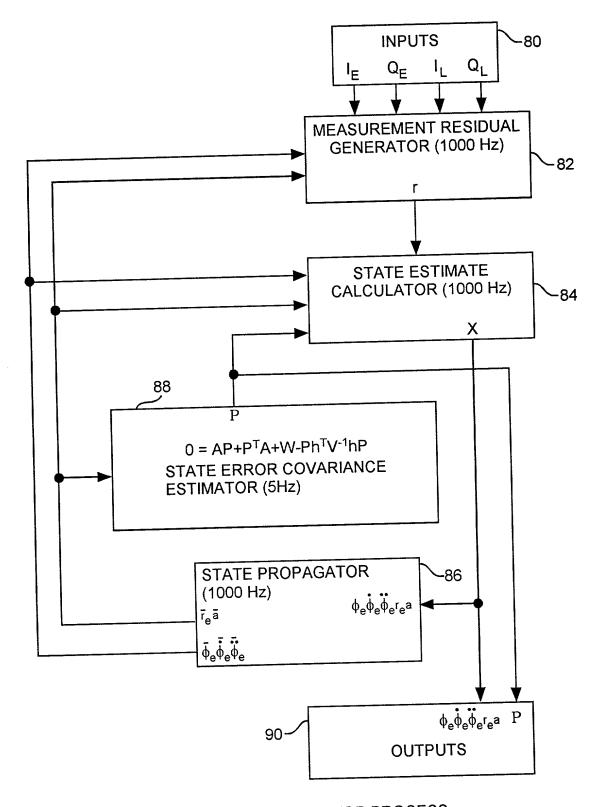


WEAK LOCK GPS NAVIGATION PROCESSOR FIG. 2A



ULTRATIGHT GPS NAVIGATION PROCESSOR

FIG. 2B



 $\begin{array}{c} \text{GPS SIGNAL RESIDUAL ESTIMATOR PROCESS} \\ \textbf{FIG. 3} \end{array}$